



**Australian Government**

# **ICPKNW315 Apply knowledge and requirements of the multimedia sector**

**Release: 1**

# ICPKNW315 Apply knowledge and requirements of the multimedia sector

## Modification History

| Release   | Comments                                                                                     |
|-----------|----------------------------------------------------------------------------------------------|
| Release 1 | This version first released with ICP Printing and Graphic Arts Training Package Version 1.0. |

## Application

This unit describes the skills and knowledge required to work in or deal with the multimedia sector of the printing industry, including having a working knowledge of related areas and a detailed knowledge of specific multimedia areas.

It applies to individuals who are working in or dealing with the multimedia sector of the printing industry and who are able to work as part of a team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## Unit Sector

Holistic knowledge

## Elements and Performance Criteria

| ELEMENT                                                | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>       | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                              |
| 1. Apply knowledge of multimedia and printing industry | 1.1 Printing industry terminology and vocabulary are used correctly<br>1.2 New technology and new work processes are monitored and implemented when required<br>1.3 Trends within printing industry are monitored, on an ongoing basis, to inform personal work practices<br>1.4 International standards and open source standards are monitored for new developments and applied where appropriate |
| 2. Apply knowledge of government Acts and              | 2.1 Basic principles and obligations involved in copyright, work health and safety (WHS), environmental protection, access and                                                                                                                                                                                                                                                                      |

| ELEMENT                                                               | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| regulations                                                           | equity, and industrial awards are applied                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3. Apply knowledge of pre-press processes                             | <p>3.1 Basic principles behind pre-press functions such as image production (typesetting, scanning, graphic arts camera), image combining (manual and electronic), image output (film, plates, direct to press) and digital workflow are understood and used in the production process where applicable</p> <p>3.2 Appropriate use of different types of images (line, half-tone) is investigated as required</p> <p>3.3 Different output settings (screen rulings, angles, shapes) and how they affect final printed product are researched and used as required</p> <p>3.4 Different types of output required for different media and printing processes are determined and used in production process where applicable</p> <p>3.5 Different output devices (film setters, plate, analogue proofs, digital proofs) are determined and used in production process where applicable</p>                                                                                                                                                                                                                                                                                                                                                                                                       |
| 4. Apply detailed knowledge of multimedia techniques and requirements | <p>4.1 Designs that are appropriate or inappropriate for multimedia are determined and applied to development process where applicable</p> <p>4.2 Criteria for choosing visual, audio or text delivery for presenting information in both passive and interactive products are applied to development process where applicable</p> <p>4.3 Differences between various markup languages and their application are applied to a range of suitable development work</p> <p>4.4 Differences between various scripting languages and their application are identified and applied to a range of suitable development work</p> <p>4.5 Criteria for selecting graphic resolution and formats, and advantages and limitations of different formats, are applied to development process where applicable</p> <p>4.6 Criteria for selecting audio formats for multimedia, and advantages and limitations of different formats, are applied to development process where applicable</p> <p>4.7 Criteria for selecting video formats for multimedia, and advantages and limitations of different formats, are applied to development process where applicable</p> <p>4.8 Criteria for selecting animation formats for multimedia, and advantages and limitations of different formats, are applied to</p> |

| ELEMENT                                                                          | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                  | <p>development process where applicable</p> <p>4.9 Multimedia platforms and computer systems requirements for different multimedia products are investigated and applied to development process where applicable</p> <p>4.10 Different software and operating systems for producing multimedia products are evaluated for different jobs</p> <p>4.11 Features of an effective navigation system for both passive and interactive products are analysed and applied to development process where applicable</p> <p>4.12 Effect of rapidly changing technology and how multimedia production needs to respond to it is investigated</p> |
| 5. Apply knowledge of colour theory                                              | <p>5.1 Colour theory of additive colours (light), Red Green Blue (RGB), is used to inform design decisions</p> <p>5.2 Colour theory of subtractive colours (pigments), Cyan, Magenta, Yellow, Key (black) (CMYK), is used to inform design decisions</p> <p>5.3 Relationship between ranges of visual colour RGB and CMYK is used to inform design decisions</p> <p>5.4 Relationship between hue and greyness for tone and colour correction is used to inform design decisions</p>                                                                                                                                                   |
| 6. Apply basic knowledge of costs of production                                  | <p>6.1 Main cost elements (fixed, capital, variable) in multimedia production are used to inform development decisions</p> <p>6.2 Information required to accurately cost jobs and means of collecting it (manual and computerised) are used to inform development decisions</p> <p>6.3 Ways of minimising use of materials without affecting quality of output are used to inform development decisions</p> <p>6.4 Ways of maximising efficiency of capital and human resources are used to inform development decisions</p>                                                                                                         |
| 7. Demonstrate basic knowledge of production management requirements and systems | <p>7.1 Types of information that need to be exchanged between different stages of production to facilitate production efficiency are identified and used to inform development decisions</p> <p>7.2 Systems (manual and computerised) that can be used to exchange information are used in workplace</p> <p>7.3 Basic principles of efficient production management are used to inform development decisions</p>                                                                                                                                                                                                                      |

## Foundation Skills

*This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.*

| Skill                      | Performance Criteria                                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading                    | 1.3, 1.4, 4.2-4.4                                     | <ul style="list-style-type: none"> <li>Researches and comprehends information in a range of text types from various sources</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Oral Communication         | 1.1                                                   | <ul style="list-style-type: none"> <li>Uses appropriate vocabulary, including technical language relevant to role and context</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Numeracy                   | 6.1, 6.2                                              | <ul style="list-style-type: none"> <li>Uses estimation and other assessment skills to check the outcomes and decide on the appropriate accuracy for the outcomes</li> <li>Interprets and analyses a range of mathematical information that is used in familiar and routine tasks</li> <li>Represents the mathematical information in a form that is personally useful as an aid to problem solving</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                               |
| Navigate the world of work | 1.2-1.4, 2.1                                          | <ul style="list-style-type: none"> <li>Maintains knowledge of the printing industry required for current role</li> <li>Complies with legislative requirements and follows organisational policies and procedures relevant to own role</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Get the work done          | 1.2-1.4, 3.1-3.5, 4.1-4.12, 5.1-5.4, 6.2-6.4, 7.1-7.3 | <ul style="list-style-type: none"> <li>Takes responsibility for planning and organising own workload using analytical processes to decide on a course of action, and assembles the resources required</li> <li>Recognises the potential of new approaches to enhance work practices and outcomes, and generates new ideas while regularly reviewing priorities and performance during implementation</li> <li>Monitors trends and identifies concepts, principles and features of approaches in use in other contexts, and redesigns these to suit own situation</li> <li>Applies formal problem-solving processes when tackling an unfamiliar problem</li> <li>Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively</li> </ul> |

## Unit Mapping Information

| Code and title<br>current version                                   | Code and title<br>previous version                                  | Comments                                        | Equivalence status |
|---------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------|--------------------|
| ICPKNW315 Apply knowledge and requirements of the multimedia sector | ICPKN315C Apply knowledge and requirements of the multimedia sector | Updated to meet Standards for Training Packages | Equivalent unit    |

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

# Assessment Requirements for ICPKNW315 Apply knowledge and requirements of the multimedia sector

## Modification History

| Release   | Comments                                                                                     |
|-----------|----------------------------------------------------------------------------------------------|
| Release 1 | This version first released with ICP Printing and Graphic Arts Training Package Version 1.0. |

## Performance Evidence

Evidence of the ability to:

- use appropriate vocabulary and terminology in written and oral communications with tradespeople, colleagues, management or clients
- apply relevant legislative and workplace requirements when completing tasks
- keep up to date with trends and standards in the multimedia and printing industry
- investigate and use different types of images, output devices and settings, and output types
- identify and use markup or scripting languages in development work
- select appropriate graphic, audio, video and animation formats in development work
- investigate and use a range of computer systems and software to produce multimedia products
- use relationships between additive colours, subtractive colours, hue and greyness to inform design decisions
- accurately plan, cost and document a print job.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

## Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe legislative and enterprise requirements that affect work practice
- describe designs that are appropriate for multimedia
- describe the criteria for choosing visual, audio or text delivery
- describe the criteria for selecting graphic resolution and formats
- describe the criteria for selecting applicable audio formats
- describe the criteria for selecting video formats
- explain the different software and operating systems for producing multimedia products
- explain the effect of rapidly changing technology on multimedia production

- describe the basic principles behind the following pre-press functions:
  - image production (typesetting, scanning, graphic arts camera)
  - image combining (manual and electronic)
  - image output (film, plates, direct to press)
- describe the relationship between ranges of visual colour Red, Green, Blue (RGB) and Cyan, Magenta, Yellow, Key (black) (CMYK)
- explain the main cost elements in pre-press production
- explain the basic principles of efficient production management.

## Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing industry and include access to:

- special purpose tools, equipment and materials
- industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>